

Amendments to the Specification

At page 1, prior to the paragraph entitled "FIELD OF THE INVENTION", please insert the following paragraph:

This application claims priority to US Provisional Application 60/413,911, filed September 27, 2002. The entire disclosure of the above identified application is incorporated by reference herein.

Please replace the indicated existing paragraphs with the following paragraphs:

(Paragraph 19) Figure 4A is an immunohistochemistry for human Kv1.5 and illustrates Kv1.5 overexpressed in CH-Ad5-Kv1.5 Pas; Figure 4B is a graph depicting mRNA expression of channels in response to CH; and Figure 4C is a graph depicting the location of the expression of Kv1.5 mRNA;

(Paragraph 20) Figures 5A, 5B, and 6 illustrate the effect of gene transfer on K⁺ Current density;

(Paragraph 22) Figure 8A illustrates mRNA<Kv1.5 and Kv2.1 expressed in the media and SMCs of DA and Figure 8B is an image of SMCs showing the localization of SM α -actin and Kv1.5;

(Paragraph 33) Figure 13A ~~and B are images~~ is an image of human DASMCM showing an elaborate mitochondrial network (100X);

(Paragraph 34) Figure ~~13C~~ 13B illustrates the effects of antimycin, rotenone and cyanide on TMRM-loaded DASMCM mitochondria and Figure 13C illustrates the effect of rapid increases in PO₂, hyperpolarize $\Delta\Psi_m$ and Rotenone depolarizes this normoxia $\Delta\Psi_m$;

(Paragraph 121) Mitochondria-derived ROS are the redox

mediators of normoxic DA constriction. Inhibitors of the proximal ETC and authentic hypoxia rapidly depolarize $\Delta\Psi_m$ in DASCs in primary, hypoxic culture, as shown in Figure ~~13A-D~~ 13A-C. On the left the DASM mitochondria, shown in ~~Figures~~ Figure 13A and B, are imaged with TMRM (nuclei stained with Hoechst 33342) and on the right they are with JC-1 (which shows high $\Delta\Psi_m$ in red and depolarized mitochondria in green). Conversely, cyanide $10\mu\text{M}$ does not acutely alter $\Delta\Psi_m$, as shown in Figure ~~13C~~ 13B. Cyanide also depolarizes $\Delta\Psi_m$, but only at high doses. $P < 0.05$ value differs from control. Rapid increases in PO_2 (from 45 to 100 mmHg) hyperpolarize $\Delta\Psi_m$ (increase in the red/green ratio measured using JC-1). Rotenone ($10\mu\text{M}$) depolarizes this normoxia $\Delta\Psi_m$ (* $P < 0.05$ value differs from control; see Figure 13C).